Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-4 (canceled)

Claim 5 (withdrawn): A method of making a cardiomyocyte comprising culturing a stem cell of claim 1 in a media that contains an appropriate amount of ascorbic acid 2-phosphate under appropriate conditions and for a sufficient period of time for the stem cell to differentiate into a cardiomyocyte.

Claim 6 (withdrawn): A cardiomyocyte obtained from the process of claim 5, which expresses at least one marker selected from the group consisting of: MLC-2A, MLC-2V, hANP, cTnT, alpha-actinin, GATA-4 and Nkx 2.5.

Claim 7 (withdrawn): A cardiomyocyte obtained from the process of claim 5, which expresses at least two markers selected from the group consisting of: MLC-2A, MLC-2V, hANP, cTnT, alpha-actinin, GATA-4 and Nkx 2.5.

Claim 8 (canceled)

Claim 9 (withdrawn): A pharmaceutical composition comprising an effective amount of a cardiomyocyte of claim 6 and a pharmaceutically acceptable carrier.

Claim 10 (withdrawn): A method of determining whether a test agent is toxic to a cardiomyocyte, comprising contacting the cardiomyocyte of claim 6 with an appropriate amount of the test agent for a time sufficient for a toxic effect on the cardiomyocyte to be detected, and determining whether the test agent has a toxic effect on the cardiomyocyte.

Claim 11 (withdrawn): A method of determining a metabolic product of a test agent comprising contacting the cardiomyocyte of claim 6 with an appropriate amount of the test agent for a time sufficient for the test agent to be metabolized, and detecting the presence of the metabolized product.

Claim 12 (withdrawn): A method of making a hepatocyte comprising culturing a stem cell of claim 1 in a media that contains an appropriate amount of dexamethasone, ITS, EGF, FGF-2, FGF-4, FGF-7, HGF, phenobarbital, Type-I collagen or a combination thereof under appropriate conditions and for a sufficient period of time for the stem cell to differentiate into a hepatocyte.

Claim 13 (withdrawn): A hepatocyte obtained from the process of claim 12, which expresses at least one marker selected from the group consisting of: albumin, CYP1A1, CYP1A2, CYP2B6, CYP2C8, CYP2C9, CYP2D6, CYP3A4, AFP, A1AT, HNF1, HNF4 and C/EBP alpha.

Claim 14 (withdrawn): A hepatocyte obtained from the process of claim 12, which expresses at least two markers selected from the group consisting of: albumin, CYP1A1, CYP1A2, CYP2B6, CYP2C8, CYP2C9, CYP2D6, CYP3A4, AFP, A1AT, HNF1, HNF4 and C/EBP alpha.

Claim 15 (canceled)

Claim 16 (withdrawn): A pharmaceutical composition comprising an effective amount of a hepatocyte of claim 13 and a pharmaceutically acceptable carrier.

Claim 17 (withdrawn): A method of determining whether a test agent is toxic to a hepatocyte comprising contacting the hepatocyte of claim 13 with an appropriate amount of the test agent for a time sufficient for a toxic effect on the hepatocyte to be detected, and determining whether the test agent has a toxic effect on the hepatocyte.

Claim 18 (withdrawn): A method of determining a metabolic product of a test agent comprising contacting the hepatocyte of claim 13 with an appropriate amount of the test agent for a time sufficient for the test agent to be metabolized, and detecting the presence of the metabolized product.

Claim 19 (withdrawn): A method of making a pancreatic cell comprising culturing a stem cell of claim 1 in a media that contains an appropriate amount of nicotinamide, dexamethasone, ITS, matrigel or a combination thereof under appropriate conditions and for a sufficient period of time for the stem cell to differentiate into a pancreatic cell.

Claim 20 (withdrawn): A pancreatic cell obtained from the process of claim 19, which expresses at least one marker selected from the group consisting of: Pax6, Pdx1, insulin, glucagon, and Nkx2.2.

Claim 21 (withdrawn): A pancreatic cell obtained from the process of claim 19, which expresses at least two markers selected from the group consisting of: Pax6, Pdx1, insulin, glucagon, and Nkx2.2.

Claim 22 (canceled)

Claim 23 (withdrawn): A pharmaceutical composition comprising an effective amount of a pancreatic cell of claim 20 and a pharmaceutically acceptable carrier.

Claim 24 (withdrawn): A method of determining whether a test agent is toxic to a pancreatic cell comprising contacting the pancreatic cell of claim 20 with an appropriate amount of the test agent for a time sufficient for a toxic effect on the pancreatic cell to be detected, and determining whether the test agent has a toxic effect on the pancreatic cell.

Claim 25 (withdrawn): A method of determining a metabolic product of a test agent comprising contacting the pancreatic cell of claim 20 with an appropriate amount of the test agent for a time sufficient for the test agent to be metabolized, and detecting the presence of the metabolized product.

Claim 26 (withdrawn): A method of making a neural cell comprising culturing a stem cell of claim 1 in a media that contains an appropriate amount of trans-retinoic acid or FGF-4 under appropriate conditions and for a sufficient period of time for the stem cell to differentiate into a neural cell.

Claim 27 (withdrawn): A neural cell obtained from the process of claim 26, which expresses at least one marker selected from the group consisting of: GFAP, CNP, beta-tubulin III, Nestin, GAD, NSE, NF-M and MBP.

Claim 28 (withdrawn): A neural cell obtained from the process of claim 26, which expresses at least two markers selected from the group consisting of: GFAP, CNP, beta-tubulin III, Nestin, GAD, NSE, NF-M and MBP.

Claim 29 (canceled)

Claim 30 (withdrawn): A pharmaceutical composition comprising an effective amount of a neural cell of claim 27 and a pharmaceutically acceptable carrier.

Claim 31 (withdrawn): A method of determining whether a test agent is toxic to a neural cell comprising contacting the neural cell of claim 27 with an appropriate amount of the test agent for a time sufficient for a toxic effect on the neural cell to be detected, and determining whether the test agent has a toxic effect on the neural cell.

Claim 32 (withdrawn): A method of determining a metabolic product of a test agent comprising contacting the neural cell of claim 27 with an appropriate amount of the test agent for a time sufficient for the test agent to be metabolized, and detecting the presence of the metabolized product.

Claim 33 (withdrawn): A method of making a vascular endothelial cell comprising culturing a stem cell of claim 1 in a media that contains matrigel under appropriate conditions and for a sufficient period of time for the stem cell to differentiate into a vascular endothelial cell.

Claim 34 (withdrawn): A vascular endothelial cell obtained from the process of claim 33, which expresses the FLT-1 marker.

Claim 35 (withdrawn): A vascular endothelial cell obtained from the process of claim 33, which has physical characteristics of cells shown in FIG. 10.

Claim 36 (canceled)

Claim 37 (withdrawn): A pharmaceutical composition comprising an effective amount of a vascular endothelial cell of claim 34 and a pharmaceutically acceptable carrier.

Claim 38 (withdrawn): A method of determining whether a test agent is toxic to a vascular endothelial cell comprising contacting the vascular endothelial cell of claim 34 with an appropriate amount of the test agent for a time sufficient for a toxic effect on the vascular endothelial cell to be detected, and determining whether the test agent has a toxic effect on the vascular endothelial cell.

Claim 39 (withdrawn): A method of determining a metabolic product of a test agent comprising contacting the vascular endothelial cell of claim 34 with an appropriate amount of the test agent for a time sufficient for the test agent to be metabolized, and detecting the presence of the metabolized product.

Claim 40 (previously presented): A composition comprising a placental stem cell isolated from the amnion wherein the composition is enriched for cells that express at least one marker selected from the group consisting of c-kit, Thy-1, Oct-4, SOX2, SSEA-3, SSEA-4, TRA1-60, TRA1-81, Lefty A, FGF-4, Rex-1 and TDGF-1.

Claim 41 (previously presented): A pharmaceutical composition comprising an effective amount of the composition of claim 40 and a pharmaceutically acceptable carrier.

Claim 42 (previously presented): A composition comprising a placental stem cell which is isolated from the amniotic epithelium and enriched for cells that express at least one marker selected from the group consisting of c-kit, Thy-1, Oct-4, SOX2, SSEA-3, SSEA-4, TRA1-60, TRA1-81, Lefty A, FGF-4, Rex-1 and TDGF-1.

Claim 43 (previously presented): A pharmaceutical composition comprising an effective amount of the composition of claim 42 and a pharmaceutically acceptable carrier.

Claim 44 (previously presented): A composition comprising a placental stem cell which is isolated from amniotic mesenchyme and enriched for cells that express Oct-4 and/or SOX2.

Claim 45 (previously presented): A pharmaceutical composition comprising an effective amount of the composition of claim 44 and a pharmaceutically acceptable carrier.

Claim 46 (previously presented): A composition comprising a cultured proliferating placental stem cell isolated from the amnion which expresses a marker selected from the group consisting of c-kit, Thy-1, Oct-4, SOX-2, SSEA-3, SSEA-4, TRA1-60, TRA1-81, Lefty A, FGF-4, Rex-1 and TDGF-1.

Claim 47 (previously presented): A pharmaceutical composition comprising an effective amount of the composition of claim 46 and a pharmaceutically acceptable carrier.

Claim 48 (previously presented): The composition of claim 46, which is effective to support proliferation of the placental stem cell for greater than 11 days.

Claim 49 (previously presented): The composition of claim 46, wherein the placental stem cell is isolated from amniotic epithelium.

Claim 50 (previously presented): The composition of claim 49, wherein the composition is enriched for cells expressing a marker selected from the group consisting of c-kit, Thy-1, Oct-4, SOX-2, SSEA-3, SSEA-4, TRA1-60, TRA1-81, Lefty A, FGF-4, Rex-1 and TDGF-1.

Claim 51 (previously presented): The composition of claim 46, wherein the placental stem cell is isolated from amniotic mesenchyme and expresses Oct-4 and/or SOX2.

Claim 52 (previously presented): The composition of claim 51, wherein the composition is enriched for cells expressing a marker selected from the group consisting of Oct-4 and SOX2.

Claim 53 (previously presented): The composition of claim 46 wherein the placental stem cell is cultured with a growth factor, a hormone, or a cytokine.

Claim 54 (previously presented): The composition of claim 46 wherein the placental stem cell is cultured with EGF.

Claim 55 (withdrawn): A method of making the enriched composition of claim 40, which comprises the step of selecting a placental stem cell isolated from the amnion which expresses a marker selected from the group consisting of c-kit, Thy-1, Oct-4, SOX-2, SSEA-3, SSEA-4, TRA1-60, TRA1-81, Lefty A, FGF-4, Rex-1 and TDGF-1.

Claim 56 (withdrawn): The method of claim 55, wherein the placental cell is isolated from the amniotic epithelium.

Claim 57 (withdrawn): The method of claim 55, wherein the cell isolated from the amnion is isolated from the amniotic mesenchyme and is selected for expression of a marker selected from the group consisting of Oct-4 and SOX2.

Claim 58 (withdrawn): The method of claim 55, wherein the selecting uses antibodies to a marker selected from the group consisting of c-kit, Thy-1, Oct-4, SOX2, SSEA-3, SSEA-4, TRA1-60, TRA1-81, Lefty A, FGF-4, Rex-1 and TDGF-1.

Claim 59 (withdrawn): The method of claim 55, wherein the placental stem cells are cultured and proliferated with a cytokine effective to support proliferation of the placental stem cells for greater than 11 days.

Claim 60 (withdrawn): The method of claim 55, wherein the placental stem cells are cultured with a growth factor, a hormone, or a cytokine.

Claim 61 (withdrawn): The method of claim 55, wherein the placental stem cells are cultured with EGF.